

## Pedestrian Bicycle Traffic Safety Advisory Committee

June 4, 2015



## Agenda

- [1] Why update the Bicycle Master Plan
- [2] Bicycle Parking
- [3] The overall approach to the master plan
- [4] Advanced work on the Shady Grove Life Sciences Center

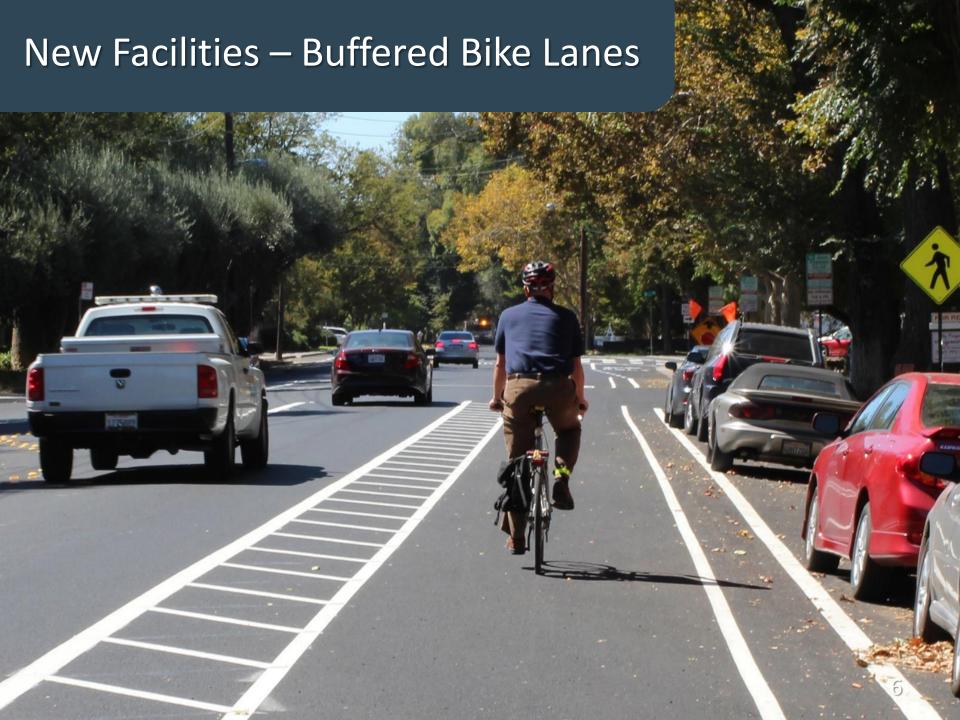


## First a thanks to the committee!



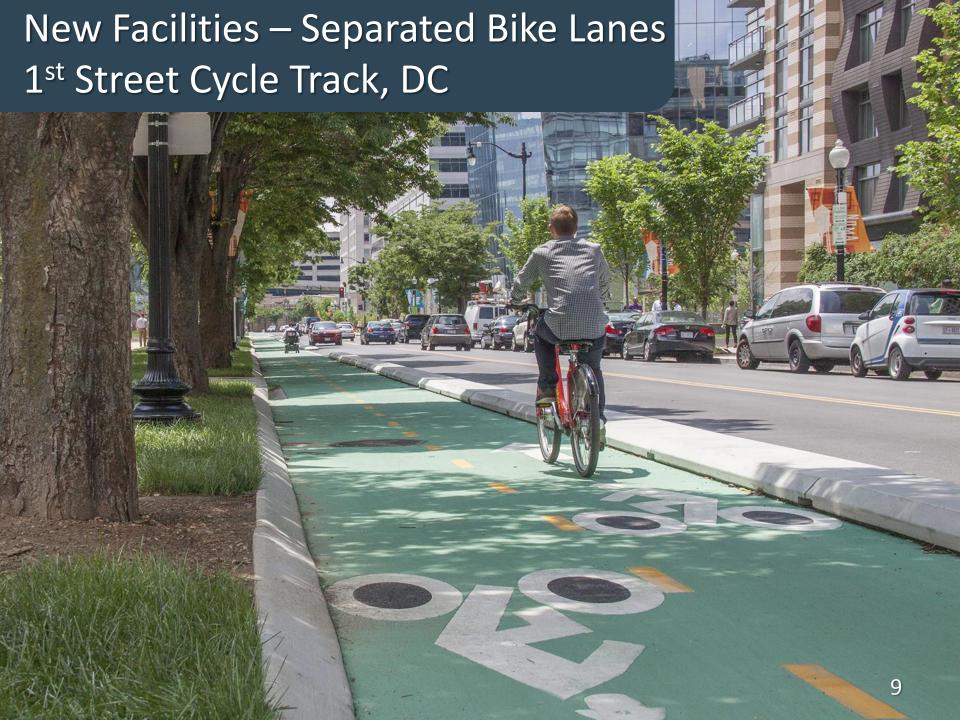
## [1] Why Update the Bicycle Master Plan?













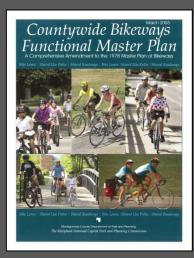


#### Consolidate Bike Recommendations

#### **Functional Plans**



1978 Master Plan of Bikeways

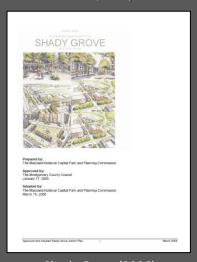


2005 Countywide Bikeways Functional Master Plan

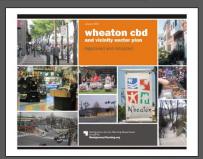
#### Area Master Plans



GSSC (2010)



Shady Grove (2006)



Wheaton CBD (2012)



White Flint (2010)



Long Branch (2013)

## Traditional User Groups





Commuters



Recreation

## New User Groups







Commuters

Running Errands

Going to School

**Accessing Transit** 

Entertainment

Recreation





## New Understanding of User Groups Four Types of Transportation Cyclists





Strong and Fearless (~1%)



Enthused and Confident (~10%)

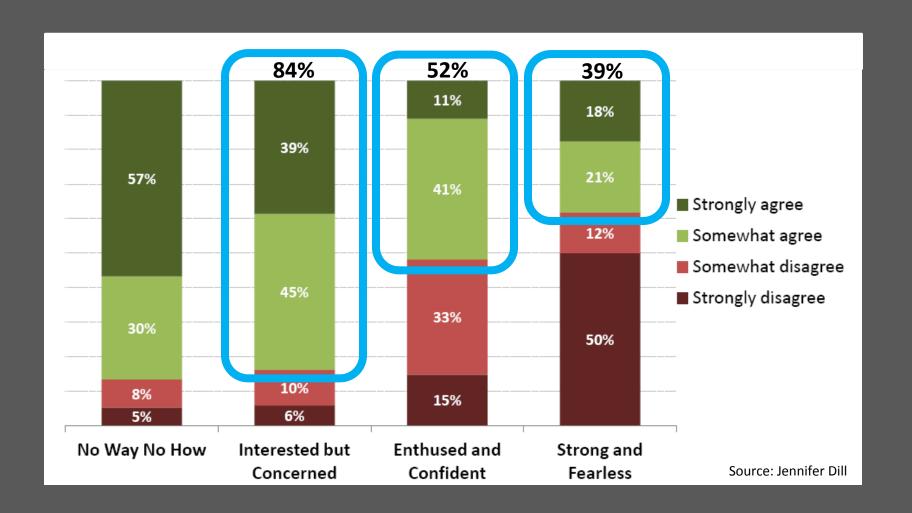


Interested but Concerned (~60%)

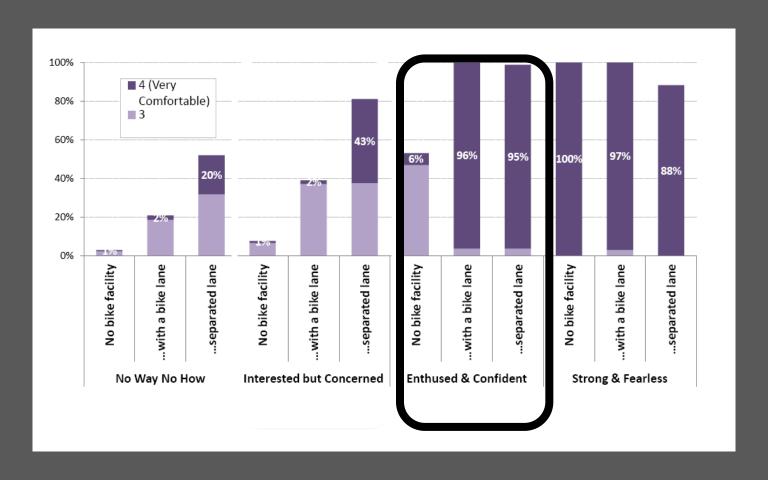


No Way, No How (~30%)

"...when I ride a bike, I'm concerned about being hit by a motor vehicle..."



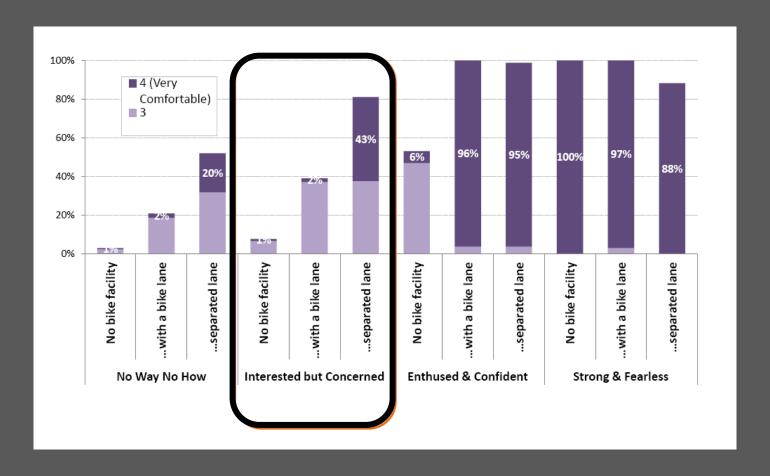
## "I'm comfortable riding on a 4-lane Road with a 30 mph speed limit"



"Enthused and Confident" group is comfortable riding on arterial roads with bike lanes

Source: Jennifer Dill

## "I'm comfortable riding on a 4-lane Road with a 30 mph speed limit"



"Interested by Concerned" group requires buffered bike lanes or cycle tracks on arterial roads

Source: Jennifer Dill

## **Approach**

All roads are part of the bike network...

...but some need bicycle facilities to make them bikeable by the general population

**Higher Stress** 

**Lower Stress** 







# How Do We Know Our Plans Need to Change?

### **Outdated Assumptions**

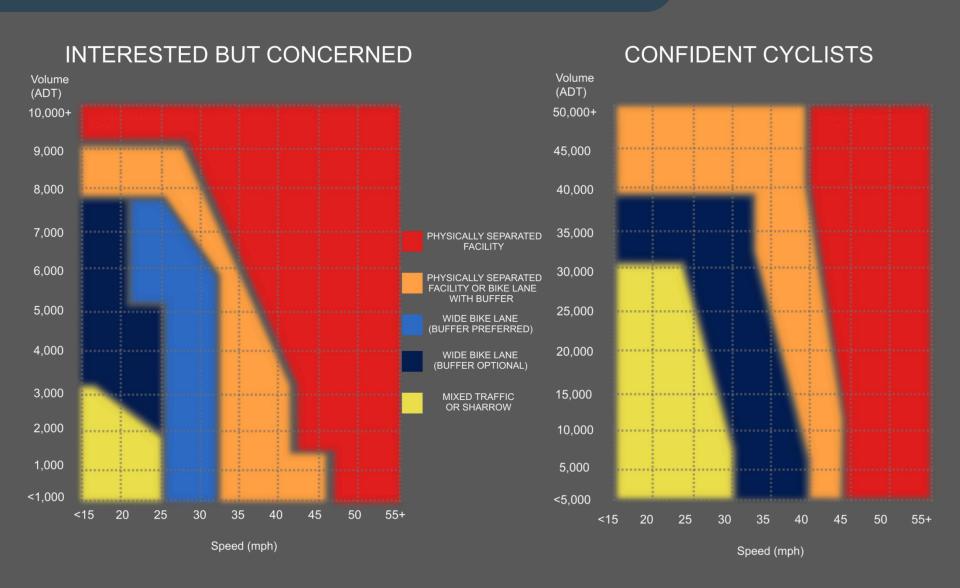


 Cyclists are concerned about traffic speed, not just traffic volume

 Shared use paths not typically appropriate in areas with high pedestrian volumes

#### Speed and Volume Charts





Great Seneca Highway (south of I-270 ramp)

Speed: 50 mph Volume: 29,000

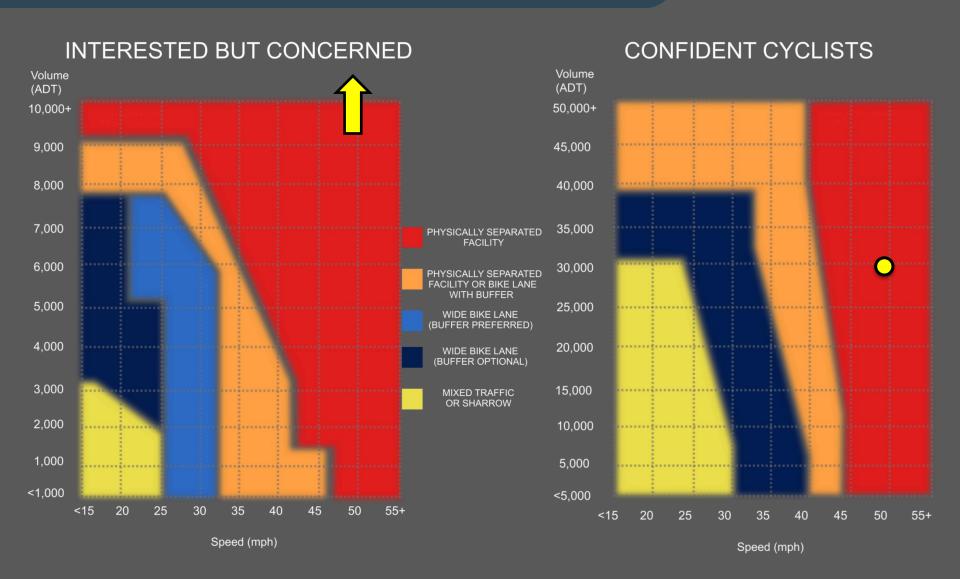




Great Seneca Highway (south of I-270 ramp)

Speed: 50 mph Volume: 29,000





Omega Drive (north of Key West Ave)

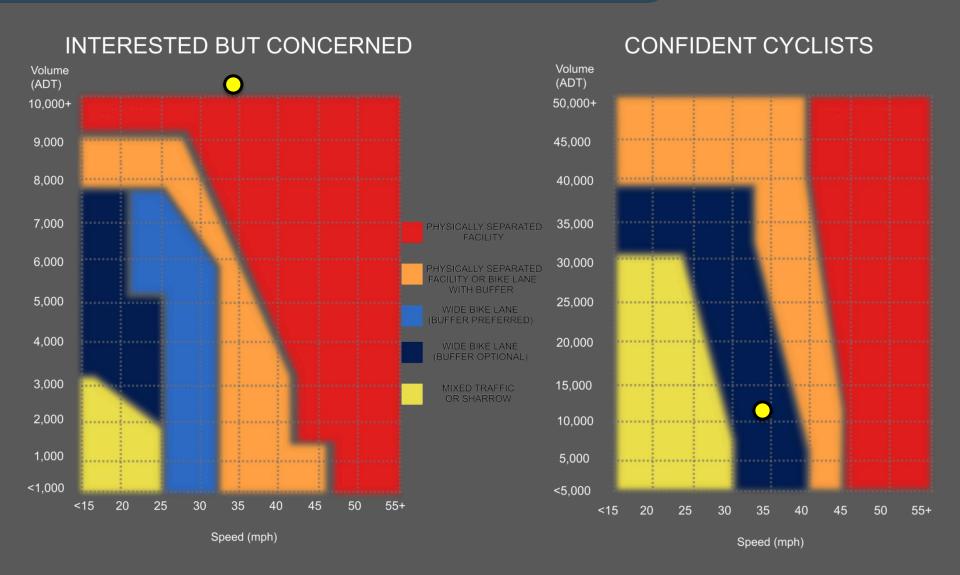
Speed: 35 mph Volume: 10,500



Omega Drive (north of Key West Ave)

Speed: 35 mph Volume: 10,500





Dufief Mill Road (south of Muddy Branch Road) Speed: 35 mph Volume: 12,500

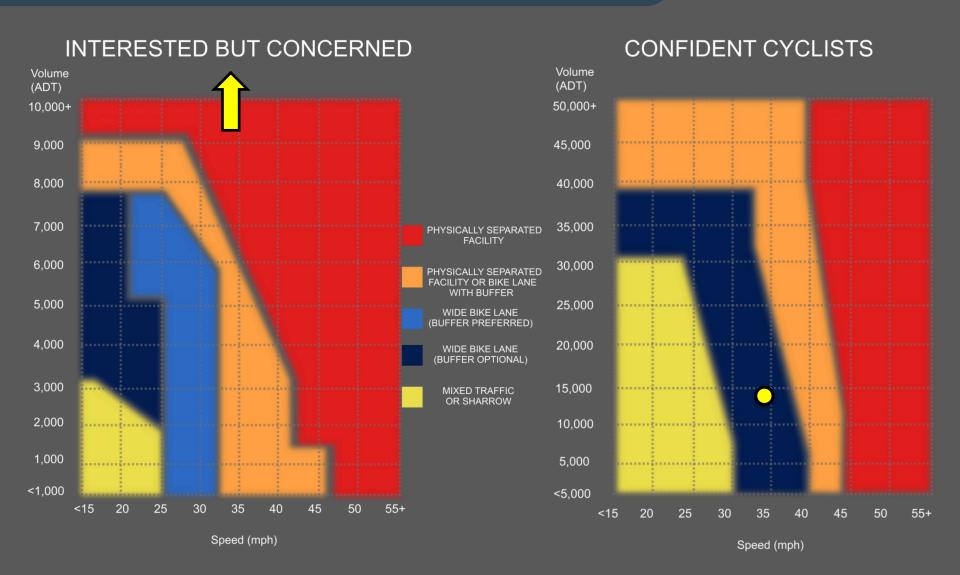




Dufief Mill Road (south of Muddy Branch Road)

Speed: 35 mph Volume: 12,500





#### **Level of Traffic Stress**



#### What are Causes of Stress When Riding a Bike?

- High traffic volumes
- High traffic speeds
- Frequent parking turnover
- Crossing major roads without a signal
- Bike lane ends

#### **Level of Traffic Stress**





- High stress, suitable for 1% of the population
- Equivalent to bicycling in traffic on 40+ mph roads



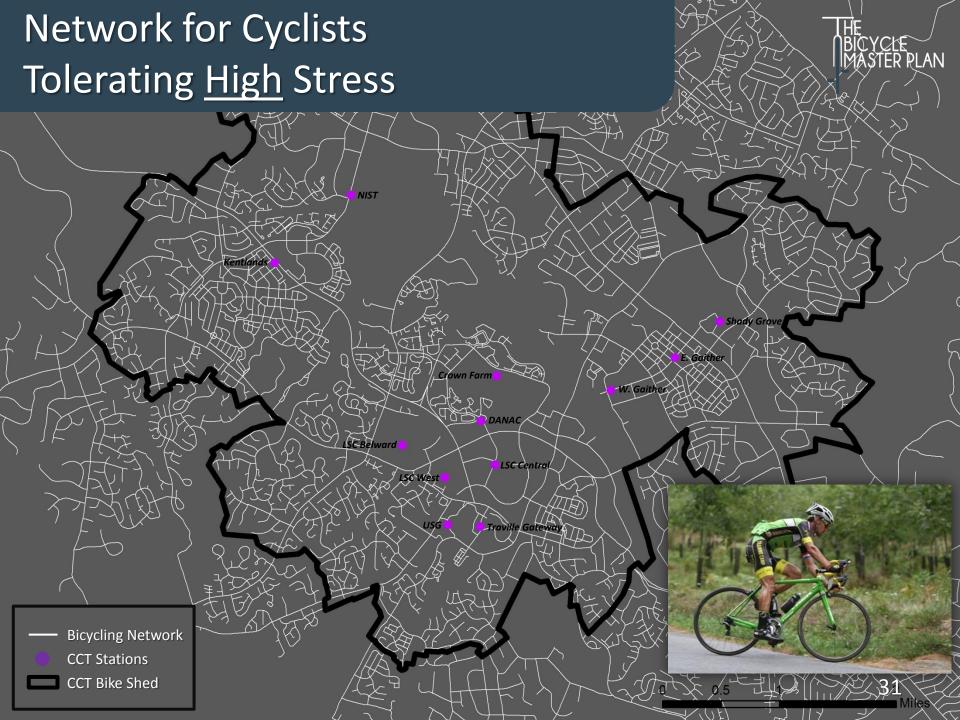
- Moderate stress, suitable for 10% of the population
- Equivalent to bicycling on 4-lane roads w/ bike lanes



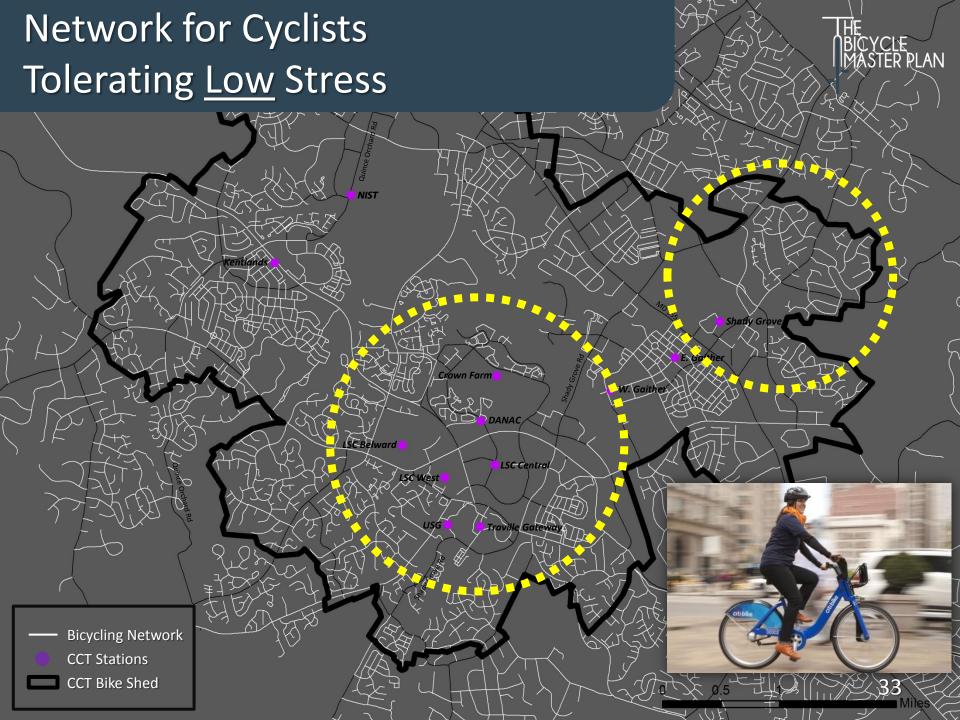
- Low stress, suitable for 60% of the population
- Equivalent to low-volume / low-speed roads



- Very low stress, requires little attention
- Equivalent to neighborhood roads, cycle tracks, trails









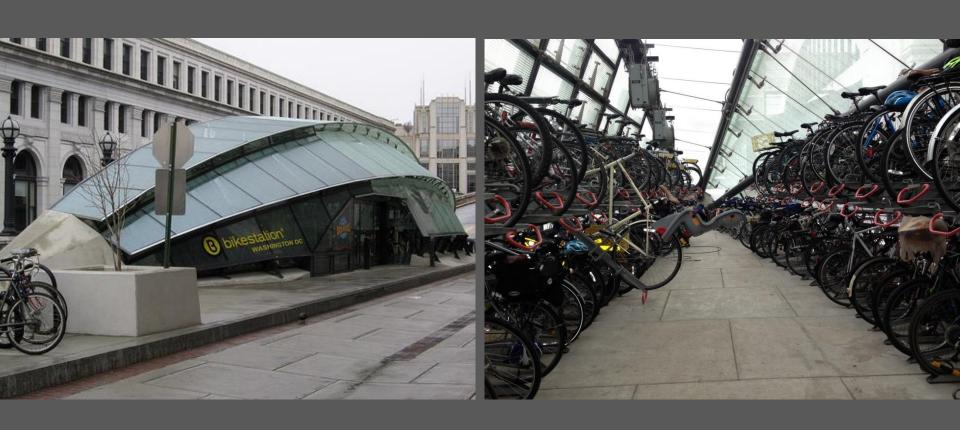
## [2] Bicycle Parking





## Union Station Metro Station District of Columbia

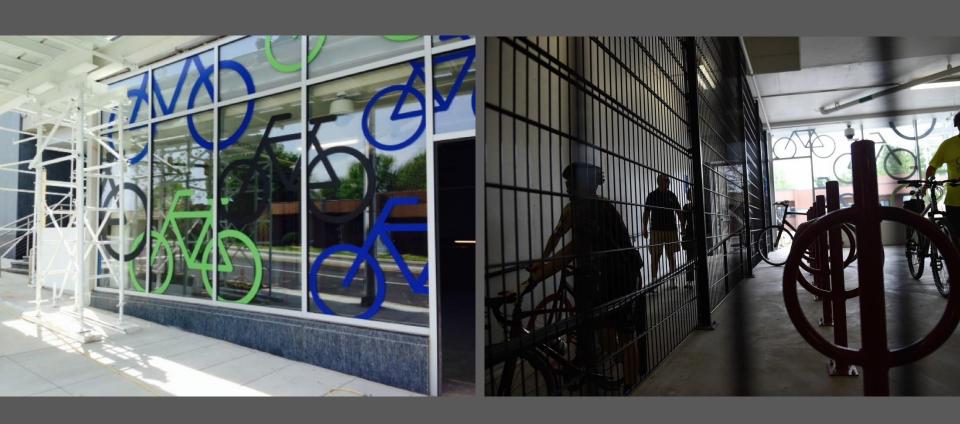




Holds 100+ bicycles. Full nearly every day.

## Wiehle Reston East Metro Station Fairfax County, Virginia





Holds 200+ bicycles. 2.5% of boardings!

## College Park Metro Station Prince George's County, Maryland







Holds 150+ bicycles. Use is growing.

### Berkeley BART Station Berkeley, California





Holds 268 bicycles. Full nearly every day.

### Bicycle Storage Recommendations



- Develop goal-based demand estimates for:
  - Red Line Stations (ex 3.5% of AM boardings by 2030)
  - Future Corridor Cities Transitway Stations
  - Future Purple Line Stations
- Recommendations
  - Bicycle storage facility location
  - Bicycle storage facility size (sq ft)



# [3] Overall Update to the Bicycle Master Plan

### A World-Class Bike Plan



- Progressive
- Data Drive
- Holistic
- Opportunistic
- Engaging

### Schedule



Focus on Corridor Cities Transitway	
April 1, 2015	Start
April 20, 2015	Public Kickoff Meeting
June 2015	Public Meeting to Review Draft
July 2015	Draft to Planning Board
Overall Update	
July 1, 2015	Start Work
Sept 2015	Planning Board Approves Scope of Work
March 2016	Methodology Report to Planning Board
Nov 2016	Staff Draft
February 2017	Planning Board Worksessions
April 2017	Planning Board Draft
Sept 2017	Council Approval of Overall Update



## [4] Advanced Work on Shady Grove Life Sciences Center Area

### What Are We Trying to Do?

 Develop consensus on a highquality bike network

 Preserve the ability to create a high-quality bicycle network in White Flint and the Shady Grove Life Sciences Center, while the master plan is under development.



GSSC (2010)



White Flint (2010)

## Great Seneca Science Corridor Implementation Advisory Committee



- Established by Planning Board in 2011
- Recommendation:

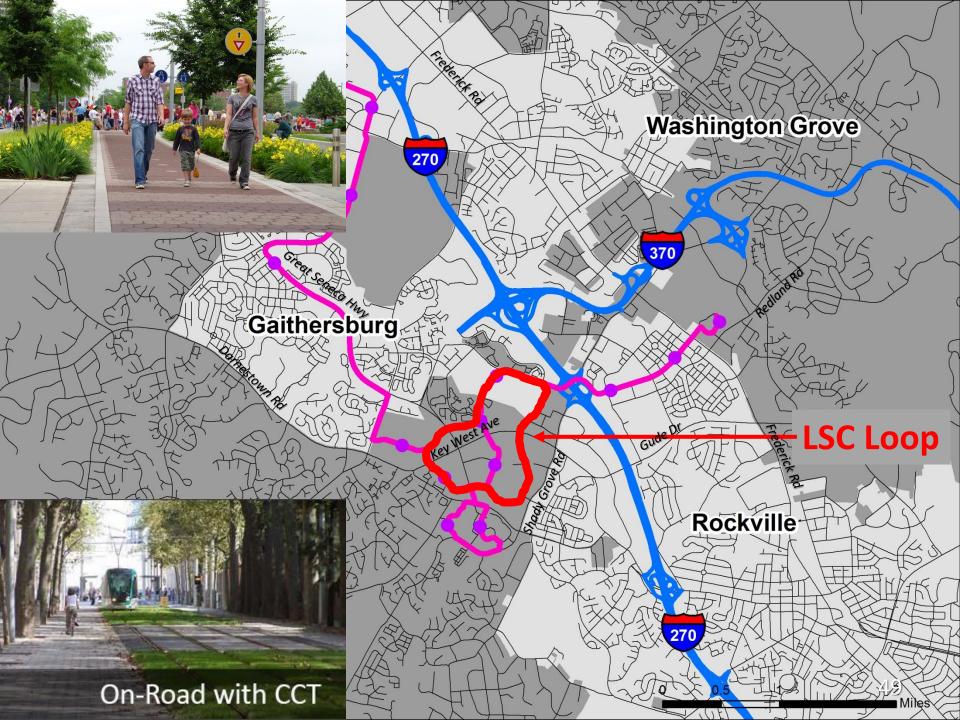
"develop a regional bikeway network plan to maximize the coordination, connectivity, and effectiveness of the regional bikeway systems in providing access to Phase 1 of the CCT stations and the communities they serve."

### Objectives



#### Facilitate coordination with:

- Corridor Cities Transitway
- LSC Loop
- Development applications



#mcbikeplan



### Questions?

#### **Project Manager**

David Anspacher

301.495.2191

david.anspacher@montgomeryplanning.org

www.montgomeryplanning.org/bikeplan